

## TASK : Assign elastic ip address for ec2 instance

→Elastic IP = Static public IP provided by AWS

### Step 1: Launch an EC2 Instance

Name: Eip-demo-ec2

Select AMI :Amazon Linux 2023 64-bit (x86) Select Free tier eligible

Instance Type: t2.micro

Key Pair: select or create the key pair

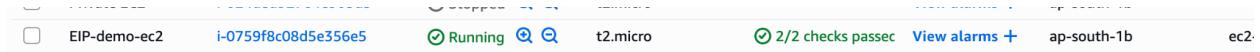
Network Settings:

- VPC: Default
- Subnet: Public subnet
- Auto-assign Public IP: Enable

Security Group :

- SSH – Port 22 – My IP
- HTTP – Port 80 – Anywhere

### Click Launch Instance



### Step 2: Assign elastic ip address for ec2 instance

Go to EC2 → Elastic IPs

Click Allocate Elastic IP

AWS creates a static public IP

A screenshot of the AWS Elastic IP Addresses page. A green success message at the top states: "Elastic IP address associated successfully. Elastic IP address 65.2.72.112 has been associated with instance i-0759f8c08d5e356e5". Below this, there's a table titled "Elastic IP addresses (1)". The table has columns: Name, Allocated IPv4 addr..., Type, Allocation ID, and Reverse DNS record. One row is shown with the values: Name - (highlighted in blue), Allocated IPv4 addr... 65.2.72.112, Type Public IP, Allocation ID eipalloc-0800d8cda2c74f9f2, and Reverse DNS record -. There are also "Actions" and "Allocate Elastic IP address" buttons.

- Select the Elastic IP
- Click Actions → Associate Elastic IP
- Choose:
  - Resource type: Instance
  - Select your EC2 instance
  - Click Associate

**Associate Elastic IP address** Info

Choose the instance or network interface to associate to this Elastic IP address (65.2.72.112)

**Elastic IP address: 65.2.72.112**

**Resource type**  
 Choose the type of resource with which to associate the Elastic IP address.

Instance  
 Network interface

**⚠️** If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. [Learn more](#)

If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address.

**Instance**

Instance search bar: i-0759f8c08d5e356e5

Instance list:

- Use: "i-0759f8c08d5e356e5"
- i-024d8a92764e905d3 (Private EC2) - stopped
- i-0759f8c08d5e356e5 (EIP-demo-ec2) - running**
- i-0ce1dadce2479651 (Public EC2) - stopped
- Allow this Elastic IP address to be reassigned

**Cancel** **Associate**

→ **O/P:** EC2 now uses Elastic IP for all internet traffic

|                                     |              |                     |                                  |  |          |   |                               |                               |             |      |
|-------------------------------------|--------------|---------------------|----------------------------------|--|----------|---|-------------------------------|-------------------------------|-------------|------|
| <input type="checkbox"/>            | Private EC2  | i-U24d8a92/b4e905d5 | <input type="checkbox"/> Stopped |  | t2.micro | - | <a href="#">View alarms +</a> | ap-south-1b                   | -           |      |
| <input checked="" type="checkbox"/> | EIP-demo-ec2 | i-0759f8c08d5e356e5 |                                  |  | t2.micro |   | 2/2 checks passed             | <a href="#">View alarms +</a> | ap-south-1b | ec2- |
| <input type="checkbox"/>            | Public EC2   | i-0ce1dadce2479651  | <input type="checkbox"/> Stopped |  | t2.micro | - | <a href="#">View alarms +</a> | ap-south-1a                   | -           |      |

i-0759f8c08d5e356e5 (EIP-demo-ec2)

**Details** **Status and alarms** **Monitoring** **Security** **Networking** **Storage** **Tags**

**▼ Instance summary** Info

|                                    |   |   |
|------------------------------------|---|---|
| Instance ID<br>i-0759f8c08d5e356e5 | Public IPv4 address<br>65.2.72.112   <a href="#">open address</a> | Private IPv4 addresses<br>172.31.4.134  |
| IPv6 address<br>-                  | Instance state<br><b>Running</b>                                  | Public DNS<br>ec2-65-2-72-112.ap-south-1.compute.amazonaws.com   <a href="#">open address</a> |

**Advantage:** if we stopped the instance also it having permanent IP address. If we are running any Jenkins server in that Instance at that time we need to use the static IP address and it should be the permanent IP address.

**Step 3:** If we dont want to use the elastic Ip address ( Deallocate Elastic IP for the EC2 instance)

Go to EC2 → Elastic IPs

Select the Elastic IP

Click Actions → Disassociate Elastic IP

Elastic IP addresses (1/2) [Info](#)

| Name                                  | Allocated IPv4 addr... | Type      | Allocation ID     |
|---------------------------------------|------------------------|-----------|-------------------|
| <input checked="" type="checkbox"/> - | 65.2.72.112            | Public IP | eipalloc-0800d8cd |
| <input type="checkbox"/> -            | 65.2.90.229            | Public IP | eipalloc-00a44487 |

Actions ▾ [Allocate Elastic IP address](#)

- [View details](#)
- [Release Elastic IP addresses](#) **1**
- [Associate Elastic IP address](#)
- [Disassociate Elastic IP address](#)
- [Update reverse DNS](#)
- [Enable transfers](#)
- [Disable transfers](#)

**o/p:** now the public Ip address will change . aws will automatically assign the ip address for the EC2 instance

Private EC2      i-024d8a92764e905d3      Stopped      t2.micro      -      View alarms +      ap-south-1b      -

EIP-demo-ec2      i-0759f8c08d5e356e5      Running      t2.micro      2/2 checks passed      View alarms +      ap-south-1b      ec2-0759f8c08d5e356e5

Public EC2      i-0ce1daadce2479651      Stopped      t2.micro      -      View alarms +      ap-south-1a      -

**i-0759f8c08d5e356e5 (EIP-demo-ec2)**

[Details](#) [Status and alarms](#) [Monitoring](#) [Security](#) [Networking](#) [Storage](#) [Tags](#)

**Instance summary** [Info](#)

|  |   |  |
|--|---|--|
| Instance ID<br><a href="#">i-0759f8c08d5e356e5</a> | Public IPv4 address<br><a href="#">52.66.236.169</a>   <a href="#">open address</a> | Private IPv4 addresses<br><a href="#">172.31.4.134</a>                           |
| IPv6 address<br>-                                  | Instance state<br><a href="#">Running</a>   | Public DNS<br><a href="#">ec2-52-66-236-169.ap-south-1.compute.amazonaws.com</a> |

#### Step 4: If we want to delete the elastic Ip address permanently

Select the same Elastic IP

Click Actions → Release Elastic IP address

Confirm

Elastic IP addresses (1/2) [Info](#)

| Name                                  | Allocated IPv4 addr... | Type      | Allocation ID     |
|---------------------------------------|------------------------|-----------|-------------------|
| <input checked="" type="checkbox"/> - | 65.2.72.112            | Public IP | eipalloc-0800d8cd |
| <input type="checkbox"/> -            | 65.2.90.229            | Public IP | eipalloc-00a44487 |

Actions ▾ [Allocate Elastic IP address](#)

- [View details](#)
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- [Associate Elastic IP address](#)
- [Disassociate Elastic IP address](#)
- [Update reverse DNS](#)
- [Enable transfers](#)
- [Disable transfers](#)
- [Accept transfers](#)

65.2.72.112

**o/p:**

Elastic IP addresses [Info](#)

| Name   | Allocated IPv4 addr... | Type | Allocation ID | Reverse DNS record |
|--|------------------------|------|---------------|--------------------|
| No Elastic IP addresses found in this Region |                        |      |               |                    |

